

ABSTRACT OF THE DISCLOSURE

A ring magnet is attached to an outer ring by a magnet holding unit. A coil hold unit attached with a generator coil is provided at an inner ring to face the ring magnet. A substrate with a transmission circuit and a loop antenna is attached to the coil hold unit. Rotation of the inner ring causes the generator coil to generate power. The generated power is applied to the transmission circuit. A sensor output or the like is transmitted by the transmission circuit as a weak wave via the loop antenna to be received at the stationary side.